

Clinical	Laboratory
Depression	Anaemia
Daytime sleepiness	Thyroid disorders
Drugs (except moderate alcohol consumption and smoking)	Iron deficiency
Medications (e.g. benzodiazepine, anti-spastic)	Vitamin B12 deficiency
	Vitamin D deficiency
	Liver disorders
	Kidney disorders
	Infections

Supplement table 1: Secondary causes of fatigue routinely assessed at our outpatient department

Asymptomatic or presymptomatic infection:	Individuals who test positive for SARS-CoV-2 using a virologic test (i.e., a nucleic acid amplification test [NAAT] or an antigen test) but who have no symptoms that are consistent with COVID-19.
Mild illness	Individuals who have any of the various signs and symptoms of COVID-19 (e.g., fever, cough, sore throat, malaise, headache, muscle pain, nausea, vomiting, diarrhoea, loss of taste and smell) but who do not have shortness of breath, dyspnoea, or abnormal chest imaging.
Moderate illness	Individuals who show evidence of lower respiratory disease during clinical assessment or imaging and who have an oxygen saturation (SpO ₂) ≥94% on room air at sea level.
Severe illness	Individuals who have SpO ₂ <94% on room air at sea level, a ratio of arterial partial pressure of oxygen to fraction of inspired oxygen (PaO ₂ /FiO ₂) <300 mm Hg, respiratory frequency >30 breaths/min, or lung infiltrates >50%.
Critical illness	Individuals who have respiratory failure, septic shock, and/or multiple organ dysfunction.

Supplement table 2: Definition of severity of initial course of COVID-19 according to NICE guideline (2)

	With depression (n=21)	Without depression (n=17)	p-value
Patient Characteristics			
Age, years, mean (95%CI), n	43.9 (38.0-49.7), 21	48.2 (39.9-56.5), 17	0.284
Female, n (%)	14/21 (66.7)	8/17 (47.1)	0.324
BMI, mean (95%CI), n	24.5 (22.9-26.2), 19	25.5 (22.3-28.8), 14	0.635
Autoimmune disease, n (%)	5/21 (23.8)	0/17 (0)	0.053
Time variable			
Duration acute infection, days, mean (95%CI), n	19.6 (15.8-23.5), 21	17.1 (13.4-20.8), 17	0.418
Time between acute infection and consultation, weeks, mean (95%CI), n	27.1 (20.5-33.7), 21	26.7 (20.1-33.3), 17	0.906
Symptoms of acute COVID-19, n (%)			
Headache, n (%)	9/21 (42.9)	8/17 (47.1)	1.0
Fever, n (%)	13/21 (61.9)	8/17 (47.1)	0.513
Anosmia, n (%)	15/21 (71.4)	8/17 (47.1)	0.185
Dyspnoea, n (%)	13/21 (61.9)	9/17 (52.9)	0.743
Cough, n (%)	13/21 (61.9)	11/17 (64.7)	1.0
Cold, n (%)	11/21 (52.4)	10/17 (58.8)	0.752
Pain, n (%)	14/21 (66.7)	9/17 (52.9)	0.509
Gastrointestinal symptoms, n (%)	2/21 (9.5)	1/17 (5.9)	1.0
Fatigue, n (%)	14/21 (66.7)	9/17 (52.9)	0.509
Sleep disturbance, n (%)	14/21 (66.7)	6/17 (35.3)	0.054
Severity of COVID-19			
Mild, n (%)	7/21 (33.3)	8/17 (47.1)	0.249
Moderate, n (%)	9/21 (42.9)	5/17 (29.4)	
Severe, n (%)	5/21 (23.8)	2/17 (11.8)	

Critical, n (%)	0/21 (0)	2/17 (11.8)	
Laboratory parameters			
Ferritin serum level, µg/l, mean (95%CI), n	169.1 (103.9-234.2), 21	253.5 (92.9-414.0), 17	0.941
CRP serum level, mg/l, mean (95%CI), n	3.2 (2.7-3.8), 21	3.3 (2.5-4.0), 17	0.730
Iron deficiency, n (%)	2/21 (9.5)	0/17 (0)	0.492
IgG-Anti-Nucleocapsid-Antibodies, serum Index, mean (95%CI), n	2.1 (1.4-2.8), 18	2.7 (1.8-3.6), 13	0.256
IgG-Anti-Spike-Antibodies, serum AU/ml mean (95%CI), n	125.0 (58.6-191.3), 18	66.8 (35.6-98.1), 13	0.466
Scores			
ESS, mean (95%CI), n	9.0 (7.1-10.9), 21	6.0 (3.8-8.3), 15	0.062
	With daytime Sleepiness (n=11)	Without daytime sleepiness (n=23)	p-value
Patient Characteristics			
Age, years, mean (95%CI), n	49.0 (38.3-60.0), 11	43.3 (37.4-49.1), 23	0.387
Female, n (%)	7/11 (63.6)	12/23 (52.2)	0.715
BMI, mean (95%CI), n	26.1 (23.9-28.3), 9	24.7 (22.6-26.8), 23	0.147
Autoimmune disease, n (%)	2/11 (18.2)	3/23 (13.0)	1.0
Time variable			
Duration acute infection, days, mean (95%CI), n	22.1 (15.4-28.8), 11	16.4 (13.5-19.2), 23	0.076
Time between acute infection and consultation, weeks, mean (95%CI), n	27.3 (17.3-37.3), 11	26.2 (20.6-31.9), 23	0.782
Acute COVID-19 infection			
Headache, n (%)	3/11 (27.3)	11/23 (47.8)	0.295
Fever, n (%)	8/11 (72.7)	13/23 (56.5)	0.506
Anosmia, n (%)	8/11 (72.7)	14/23 (60.9)	0.705
Dyspnoea, n (%)	10/11 (90.9)	11/23 (47.8)	0.024
Cough, n (%)	9/11 (81.8)	13/23 (56.5)	0.252
Cold, n (%)	5/11 (45.5)	4/23 (17.4)	0.475
Pain, n (%)	6/11 (54.5)	16/23 (69.6)	0.459

Gastrointestinal symptoms, n (%)	3/11 (27.3)	0/23 (0)	0.028
Fatigue, n (%)	8/11 (72.7)	15/23 (65.2)	1.0
Sleep disturbance, n (%)	11/11 (100)	9/23 (39.1)	0.001
Severity of COVID-19			
Mild, n (%)	1/11 (9.1)	11/23 (47.8)	0.097
Moderate, n (%)	6/11 (54.5)	8/23 (34.8)	
Severe, n (%)	3/11 (27.3)	4/23 (17.4)	
Critical, n (%)	1/11 (9.1)	0/23 (0)	
Laboratory parameters			
Ferritin serum level, µg/l, mean (95%CI), n	166.2 (-19.0-351.4), 11	232.30 (139.7-324.9), 23	0.030
CRP serum level, mg/l, mean (95%CI)	3.4 (2.3-4.4), 11	3.0 (2.8-3.1), 23	0.557
Iron deficiency, n (%)	1/11 (9.1)	1/23 (4.3)	1.0
IgG-Anti-Nucleocapsid-Antibodies, serum Index, mean (95%CI), n	2.8 (1.5-4.1), 10	2.1 (1.5-2.7), 18	0.251
IgG-Anti-Spike-Antibodies, serum AU/ml mean (95%CI), n	122.1 (34.1-210.1), 10	87.3 (31.3-143.3), 18	0.187
Scores			
BDI II, mean (95%CI), n	22.0 (14.0-30.0), 10	14.0 (11.3-16.7), 23	0.031

Supplement Table 3: Comparison of fatigued patients with Post-COVID-19 syndrome with and without daytime sleepiness or depressive mood.

Abbreviations: 95%CI: 95% Confidence interval; BDI-II: Beck Depression Index II; BMI: Body Mass Index; CRP: C-reactive protein, ESS: Epworth Sleepiness Scale.

Statistic: Clinical phenomenology of fatigue and present comorbidities as well as serological findings were analysed using Mann-Whitney U Test (MWU) and Chi-Quadrat-Test, respectively. Adjustment for multiple testing was performed by Bonferroni procedure in regard to each domain independently: patient characteristics: p-value < 0.0125, time variable: p-value < 0.025, acute infection: p-value < 0.006, severity of COVID-19 infection: p-value < 0.0125, laboratory parameters: p-value < 0.01, scores: p-value < 0.05